WHAT IS CLAIMED IS:

- 1. A method of enhancing total tract digestibility of one or more dietary components in a companion animal, the method comprising administering to the companion animal a companion animal composition comprising fructooligosaccharide.
- 2. The method according to Claim 1 which is a method of enhancing total tract digestibility of a plurality of dietary components.
- 3. The method according to Claim 2 wherein the companion animal composition comprises from about 0.01% to about 10% fructooligosaccharide, by weight of the composition.
- 4. The method according to Claim 3 which is a method of enhancing total tract digestibility selected from the group consisting of total tract ash digestibility, total tract fiber digestibility, total tract fat digestibility, total tract dry matter digestibility, and combinations thereof.
- 5. The method according to Claim 4 wherein the companion animal composition comprises from about 0.01% to about 5% fructooligosaccharide, by weight of the composition.
- 6. The method according to Claim 5 wherein the fructooligosaccharide comprises inulin.
- 7. The method according to Claim 5 wherein the fructooligosaccharide comprises chicory.
- 8. The method according to Claim 5 wherein the fructooligosaccharide is a short chain oligofructose comprising from about 30% to about 40% 1-kestose, from about 50% to about 60% nystose, and from about 5% to about 15% 1F-beta-fructofuranosylnystose, by weight of the short chain oligofructose.
- 9. The method according to Claim 8 wherein the companion animal composition comprises from about 0.01% to about 2% fructooligosaccharide, by weight of the composition.
- 10. The method according to Claim 9 wherein the companion animal composition is a nutritionally balanced food.

- 11. The method according to Claim 10 wherein the companion animal composition further comprises a protein source selected from the group consisting of beef, pork, lamb, poultry, fish, vegetable, and mixtures thereof.
- 12. The method according to Claim 11 wherein the companion animal composition comprises from about 0.01% to about 0.2% fructooligosaccharide, by weight of the composition.
- 13. The method according to Claim 12 wherein the companion animal composition is administered at least once daily.
- 14. The method according to Claim 13 wherein the companion animal is a dog.
- 15. The method according to Claim 13 wherein the companion animal is a cat.
- 16. The method according to Claim 13 wherein the companion animal composition further comprises a fiber source additional to the fructooligosaccharide.
- 17. The method according to Claim 16 wherein at least a portion of the fiber source is selected from the group consisting of fructooligosaccharide additional to the short chain oligofructose, beet pulp, gum arabic, gum talha, psyllium, rice bran, carob bean gum, citrus pulp, pectin, mannanoligofructose, soy fiber, arabinogalactan, galactooligosaccharide, arabinoxylan, and mixtures thereof.

18. A kit comprising:

- (a) a companion animal composition comprising fructooligosaccharide; and
- (b) information that use of the companion animal composition by a companion animal is useful for enhancing total tract digestibility of one or more dietary components in a companion animal.
- 19. The kit according to Claim 18 comprising information that use of the companion animal composition by a companion animal is useful for enhancing total tract digestibility of a plurality of dietary components in the companion animal.

- 20. The kit according to Claim 19 wherein the companion animal composition comprises from about 0.01% to about 5% fructooligosaccharide, by weight of the composition.
- 21. The kit according to Claim 20 wherein the fructooligosaccharide comprises inulin.
- 22. The kit according to Claim 20 wherein the fructooligosaccharide comprises chicory.
- 23. The kit according to Claim 20 wherein the fructooligosaccharide is a short chain oligofructose comprising from about 30% to about 40% 1-kestose, from about 50% to about 60% nystose, and from about 5% to about 15% 1F-beta-fructofuranosylnystose, by weight of the short chain oligofructose.
- 24. The kit according to Claim 23 wherein the companion animal composition comprises from about 0.01% to about 2% fructooligosaccharide, by weight of the composition.
- 25. The kit according to Claim 24 wherein the companion animal composition is a nutritionally balanced food.
- 26. The kit according to Claim 25 wherein the companion animal composition further comprises a protein source selected from the group consisting of beef, pork, lamb, poultry, fish, vegetable, and mixtures thereof.
- 27. The kit according to Claim 26 wherein the companion animal composition comprises from about 0.01% to about 0.2% fructooligosaccharide, by weight of the composition.
- 28. The kit according to Claim 27 wherein the companion animal is a dog.
- 29. The kit according to Claim 27 wherein the companion animal is a cat.
- 30. The kit according to Claim 27 wherein the companion animal composition further comprises a fiber source additional to the fructooligosaccharide.
- 31. The kit according to Claim 30 wherein at least a portion of the fiber source is selected from the group consisting of fructooligosaccharide additional to the short chain oligofructose,

beet pulp, gum arabic, gum talha, psyllium, rice bran, carob bean gum, citrus pulp, pectin, mannanoligofructose, soy fiber, arabinogalactan, galactooligosaccharide, arabinoxylan, and mixtures thereof.

- 32. A method selected from the group consisting of enhancing calcium absorption, improving bone health, improving strength, improving physical activity performance, and combinations thereof, the method comprising administering to a companion animal a companion animal composition comprising fructooligosaccharide.
- 33. The method according to Claim 32 wherein the companion animal is selected from the group consisting of dogs, cats, and combinations thereof.
- 34. The method according to Claim 33 which is selected from the group consisting of enhancing calcium absorption, improving bone health, and combinations thereof.
- 35. The method according to Claim 34 wherein the companion animal composition comprises from about 0.01% to about 5% fructooligosaccharide, by weight of the composition.
- 36. The method according to Claim 35 wherein the fructooligosaccharide comprises inulin.
- 37. The method according to Claim 35 wherein the fructooligosaccharide comprises chicory.
- 38. The method according to Claim 35 wherein the fructooligosaccharide is a short chain oligofructose comprising from about 30% to about 40% 1-kestose, from about 50% to about 60% nystose, and from about 5% to about 15% 1F-beta-fructofuranosylnystose, by weight of the short chain oligofructose.
- 39. The method according to Claim 38 wherein the companion animal composition comprises from about 0.01% to about 2% fructooligosaccharide, by weight of the composition.
- 40. The method according to Claim 39 wherein the companion animal composition is a nutritionally balanced food.

- 41. The method according to Claim 40 wherein the companion animal composition comprises from about 0.01% to about 0.2% fructooligosaccharide, by weight of the composition.
- 42. The method according to Claim 41 wherein the companion animal composition is administered at least once daily.
- 43. The method according to Claim 42 wherein the companion animal composition comprises from about 0.01% to about 5% fructooligosaccharide, by weight of the composition.
- 44. The method according to Claim 43 wherein the fructooligosaccharide comprises inulin.
- 45. The method according to Claim 43 wherein the fructooligosaccharide comprises chicory.
- 46. The method according to Claim 43 wherein the fructooligosaccharide is a short chain oligofructose comprising from about 30% to about 40% 1-kestose, from about 50% to about 60% nystose, and from about 5% to about 15% 1F-beta-fructofuranosylnystose, by weight of the short chain oligofructose.
- 47. The method according to Claim 33 which is a method selected from the group consisting of improving strength, improving physical performance, and combinations thereof.
- 48. The method according to Claim 47 wherein the companion animal composition comprises from about 0.01% to about 5% fructooligosaccharide, by weight of the composition.
- 49. The method according to Claim 48 wherein the fructooligosaccharide comprises inulin.
- 50. The method according to Claim 48 wherein the fructooligosaccharide comprises chicory.
- 51. The method according to Claim 48 wherein the fructooligosaccharide is a short chain oligofructose comprising from about 30% to about 40% 1-kestose, from about 50% to about 60% nystose, and from about 5% to about 15% 1F-beta-fructofuranosylnystose, by weight of the short chain oligofructose.

- 52. The method according to Claim 51 wherein the companion animal composition comprises from about 0.01% to about 2% fructooligosaccharide, by weight of the composition.
- 53. The method according to Claim 52 wherein the companion animal composition is a nutritionally balanced food.
- 54. The method according to Claim 53 wherein the companion animal composition comprises from about 0.01% to about 0.2% fructooligosaccharide, by weight of the composition.
- 55. The method according to Claim 54 wherein the companion animal composition is administered at least once daily.
- 56. A kit comprising:
 - (a) a companion animal composition comprising fructooligosaccharide; and
 - (b) information that use of the companion animal composition by a companion animal is useful for a purpose selected from the group consisting of enhancing calcium absorption, improving bone health, improving strength, improving physical activity performance, and combinations thereof.
- 57. The kit according to Claim 56 wherein the companion animal is selected from the group consisting of dogs, cats, and combinations thereof.
- 58. The kit according to Claim 57 wherein the companion animal composition comprises from about 0.01% to about 5% fructooligosaccharide, by weight of the composition.
- 59. The kit according to Claim 58 wherein the fructooligosaccharide comprises inulin.
- 60. The kit according to Claim 58 wherein the fructooligosaccharide comprises chicory.
- 61. The kit according to Claim 60 wherein the fructooligosaccharide is a short chain oligofructose comprising from about 30% to about 40% 1-kestose, from about 50% to about 60% nystose, and from about 5% to about 15% 1F-beta-fructofuranosylnystose, by weight of the short chain oligofructose.

- 62. The kit according to Claim 61 wherein the companion animal composition comprises from about 0.01% to about 2% fructooligosaccharide, by weight of the composition.
- 63. The kit according to Claim 62 wherein the companion animal composition comprises from about 0.01% to about 0.2% fructooligosaccharide, by weight of the composition.